DOCUMENT RESUME

ED 113 002 JC 750 556

AUTHOR MacMillan, Thomas F.
TITLE The Change Project at Mendocino College: Achieving Consensus on Curriculum Goals for an Integrated Liberal Arts Curriculum.
PUB DATE 15 Apr 75
NOTE 15p.; Paper presented at the Annual Meeting of the American Association of Community and Junior Colleges (Seattle, Washington, April 13-16, 1975)

EDRS PRICE MF-$0.76 HC-$1.58 Plus Postage
DESCRIPTORS Curriculum Development; *Curriculum Planning; Experimental Programs; *Integrated Curriculum; *Junior Colleges; *Liberal Arts; Rural Schools; Thematic Approach; *Unified Studies Programs
IDENTIFIERS *Change in Liberal Education Project; Delphi Technique

ABSTRACT

Mendocino College (California) is participating in the national Change in Liberal Education Project, which attempts to design comprehensive liberal arts curricula around a single unifying topic. The program at Mendocino focuses on the World Food Crisis, an area of study which is well-suited to the agricultural character of the local community. In order to achieve consensus on the curriculum goals of the program, the planning team participated in a modified Delphi study. Three goal categories--Knowledge, Skills and Abilities, Attitudes and Values--were considered separately, and formed a basis for further development of specific instructional objectives in each of the related disciplines of the project. An explanation of the Delphi technique employed and the results obtained in one of the goal categories, Knowledge, are included in the document. The author closes with a brief statement of the intended outcomes of the college's 36 credit hour program, which includes courses in the humanities, social sciences, and natural sciences. (LO)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

ED113002

The Change Project at Mendocino College: Achieving Consensus on Curriculum Goals for an Integrated Liberal Arts Curriculum

April 15, 1975

American Association of Community and Junior Colleges

Seattle, Washington

Thomas F. MacMillan, Ed.D.

Dean of Student Personnel Services

Mendocino College - Ukiah, California

JC 750 550

The Change Project at Mendocino College: Achieving Consensus on Curriculum Goals for an Integrated Curriculum

Background

At the time the announcement came for the Change in Liberal Education Project, Mendocino College was one year old, a public community college operating in the rural setting of Ukiah, California, sharing the facilities of the Twelfth District Fairgrounds and facing all of the problems of identity that beset new community colleges everywhere. The predominantly agricultural character of the service area of the College has historically caused the young people of Mendocino and Lake counties to face the decision of whether to develop technical or commercial skills that would allow them to leave the area, or to participate in some way in the revitalization of the local economy, with its roots in timber and the soil.

For the majority of residents in the service area of the Mendocino Community College District, higher education is a new opportunity. About 9% of the adults 25 year of age or older in Mendocino County are college graduates, and about 10% have eight years or less of formal education. Career and occupational opportunities in the area are primarily in Lumber and Wood products (21%), Trade (16%), Services (12%) and Agriculture (7%). City and county governments, the state and federal agencies and local school districts employ an additional 17% of the labor force. Seasonal cycles in Lumber and agriculture create an unemployment picture that ranges from about 5% during peak employment to nearly 20% during the winter

months. Traditionally, access to the labor force in the area has not required post-secondary preparation, and so a relatively low value for higher education is found in the majority of the labor force.

During the last decade, new influences have had an impact on the community in which Mendocino College has made its first home. A State Hospital, which had been located in Mendocino County for about thirty years, developed new services during the 1960's, expanded staff, and, in a period of reassessment of State budget priorities, closed in 1971. Many professionals from the staff, however, became a permanent part of the community, a number of them entering private practice or consultation. Since 1970, a number of private non-profit service agencies have developed to provide manpower and community services supplemental to those offered by the existing public agencies. An exemplary, nationally funded, program to train mental health paraprofessionals for New Careers was operating in the community at the time Mendocino College came into existence, and has been incorporated into the curriculum of the new institution.

The area has attracted many people seeking to develop an alternative life-style. Efforts to establish intentional communities have been a part of the recent history of Mendocino County, and many families have come "back to the land" in this area, seeking to sustain themselves on the fruits of rural technologies. The contact between these new influences and the traditional ones of the area has been productive and peaceful, by and large. The only serious issue currently being faced with accomodation on both sides is the conformance of non-traditional single-family, owner occupied dwellings to building, health and safety codes.

It has been within this social context that Mendocino College has begun to define its goals for educational service.

The Mendocino College Project: Focus on the World Food Crisis

In June, 1974, Mendocino College responded to the call for proposals to the national Change in Liberal Education project. An initial planning group consisting of an administrator, two division chairpersons, and two faculty members met to discuss how Mendocino College could organize a curriculum responsive to the interests and needs of the community, while at the same time including a broad spectrum of the Liberal Arts in an intensive learning experience. The experiences of such institutions as the Evergreen State College and the University of Wisconsin at Green Bay in developing Coordinated Studies programs and focussed curriculum options were models for the thinking of the planning group, as was the work of Mayhew and Ford (Changing the Curriculum: Jossey-Bass, 1971). At the end of our preliminary discussions, consensus had been reached that we would develop an integrated curriculum pattern related to a theme of broad and significant world interest.

The World Food Crisis was selected as the theme for the curriculum for several reasons. First, it is a problem that is taken seriously by young people of college age. Currently, the United Nations estimates that over 1/3 of the world population gets insufficient calories; over one half gets insufficient protein; 2/3 of the 800 million children in the less developed countries of Asia, Africa, and Latin America suffer from malnutrition. The World Food Conference was followed by many with great interest, especially in rural and agricultural America. In California, a University of California Food Task Force published a major study of the particular relevance ofthe world crisis to California agriculture (Hungry World: The Challenge to Agriculture: University of California, July, 1974). In Mendocino County several important resources were available to the College, including the Agricultural Field Station of the University of California, and the Biodynamic Gardening Project di-

rected in Covelo by Alan Chadwick.

Thus the conclusion of the initial planning group at Mendocino College was to develop an integrated curriculum focussed on the general theme of the World Food Crisis, and drawing on a variety of disciplines in the Humanities, Social Sciences, and Natural Sciences. The classroom experiences in the project would be supplemented by intensive field learning of labor-intensive gardening methods that could be adopted by families who wished to produce some of their own vegetables and fruits. It would be central to the planning of the project that the development of specific curriculum goals would be the responsibility of all constituencies; students, the faculty, and the administration, as represented on the institutional Project Planning Group.

By September, 1974, as negotiations continued with the National Change in Liberal Education Project, the local group was ready to begin the task of specifying curriculum goals.

The Delphi Procedure for Goal Consensus

The specific procedure used to set curriculum goals at Mendocino College was the consensus technique known as "Delphi." In essence, the Delphi method involves the use of questionnaires and other formal channels to accomplish controlled interaction among members of a decision making group. Delphi procedures have three features: (1) anonymity of individual responses, (2) controlled feedback, and (3) a defined statistical presentation of group responses. In a situation involving administration, faculty and students in a common planning venture, such a procedure is very valuable to assure openness to a wide range of opinions and feelings. One of the developers of the method, Dr. Norman Dalkey, has referred to Delphi as "A rapid and relatively efficient way to 'cream the tops of the heads' of a group of knowledgeable people."

The advantages of anonymity in the procedure include the sharing of responsibility entirely throughout the group without identifying the specific source of divergent opinion in the decision-making process. Anonymity further serves to release responses that may otherwise be inhibited through group pressure, particularly in open discussion. Finally, the use of anonymity serves to allow the group, through written anonymous responses and evaluations, to avoid "adversary" or "confronted" situations in which the resolution of conflict may be diverted from substantive issues.

The use of controlled feedback, particularly through several repetitions of rating questionnaires. serves to focus for the group the emerging definition of priorities as the sequence of iterations moves from the most general to the most specific levels. In the procedure used at Mendocino College, numerical ratings on a scale of 1 to 100 were applied to curriculum goals that had been nominated by all members of the planning team. The group was presented with median and inter-

quartile range scores for each item, which served to illustrate the diversity of opinion within the group, and also showed the direction of consensus in each of three iterations of the process.

In community colleges, the Delphi procedure has been used in a number of ways since the Committee on Research and Development of the California Community and Junior College Association sponsored a workshop on Delphi in 1971. Facilities planning, job specifications, institutional goals, curriculum plans, and effectiveness of programs have all been the object of Delphi consensus in the last five years. One particularly extensive study was conducted by the Northern California Community College Research Group to ascertain which vocational programs were perceived to be most effective (A Field Study to Determine Characteristics of Most Successful Vocational Education Programs: Shasta College, 1972). In that study, the Delphi procedure was compared with far more complex and sophisticated multivariate analysis techniques and shown to be equally effective for decision-making purposes. A very useful formula for calculating the probability that two independent Delphi panels would concur in their ranking of items was developed by the NORCAL group for the vocational education study.

In the Mendocino College project, the Project Planning Group was given an initial orientation to the formulation of curriculum goals. Members of the team were given a brief abstract from Bloom's Taxonomy of Educational Objectives to assist them in developing possible items for consideration. Three broad areas were defined for planning goals: Knowledge, Skills and Abilities, and Attitudes and Values. Following the initial orientation, the team members "brainstormed" possible items that could become curriculum goals for the project. Individually,

the team members wrote curriculum goal statements for each of the three major headings. Throughout, the focus was maintained by asking the question, "What has this goal to do with the objectives of the project to develop in students a comprehensive understanding of the World Food Crisis and to provide a broad educational experience in the Liberal Arts?"

To facilitate the process, the team determined in advance that "consensus" on any goal would be operationally defined as "a median rating score of 75 on a scale of 1 to 100, with an interquartile range no greater than 50." The consensus of the group would be assessed in three iterations, or rounds, with feedback to all members at the conclusion of each round. An open discussion of the final consensus list would be held at the end of the third round to assure that final agreement was firm and clear.

The same procedure was to be used for consensus in each of the three categories of discussion: Knowledge, Skills and Abilities, and Attitudes and Values. At the end of all three categories, the curriculum goals would be synthesized by the group as a basis for further development of specific instructional objectives in each of the related disciplines of the project. A faculty planning team would then be assigned to develop an integrated curriculum for the project, to be implemented as a one year curriculum including no less than 36 semester units of college credit during the 1975-76 academic year.

To illustrate the procedure from the Mendocino College project, the group consensus on Knowledge Goals may serve as an example. Initially, 40 items were submitted by the planning group for consideration. No items were eliminated until the second round, when those failing to meet the criteria were discarded (Median of 75; range no greater than 50). By the end of the third round, the seventeen items below were included as

the final consensus of the group. For purposes of illustration, scores on each Round (RI, RII, RIII) are shown, along with interquartile ranges (Q1,Q3, Range).

Knowledge of Labor Intensive (Bio-dynamic) Gardening Principles

RI	Q1=100	Md=100	Q3=100	Range=0
RII	80	100	100	Range=20
RIII	100	100	100	Range=0

Knowledge of Basic Food Crop Production for Small Consumption

RI	Q1= 90	Md=100	Q3=100	Range=10
RII	100	100	100	Range=0
RIII	95	100	100	Range= 5

Knowledge of the Biosphere as Related to Food Production

RI	Q1= 75	Md=100	Q3=100	Range=25
RII	80	100	100	Range=20
RIII	85	100	100	Range=15

Knowledge of the Principles of Nutrition

RI	Q1= 80	Md=100	Q3=100	Range=20
RII	85	100	100	Range=15
RIII	80	85	100	Range=20

Knowledge of Man as a Time-Binding Species (Music, Literature, the Arts)

RI	Q1= 30	Md= 80	Q3= 90	Range=60
RII	20	75	100	Range=80
RIII	75	100	100	Range=25

Knowledge of the Physical Properties of Soils, Climate and Other Factors which Influence Crop Production

RI	Q1= 85	Md=100	Q3=100	Range=15
RII	100	100	100	Range=0
RIII	75	100	100	Range=25

Knowledge of the Principles of Alternative Energy Sources, Methods

RI	Q1= 80	Md=100	Q3=100	Range=20
RII	75	100	100	Range=25
RIII	75	90	100	Range=25

Knowledge of Man as a Community Species (Cultural, Social Patterns)

	Q1	Md	Q3	Range
RI	Q1=50	Md= 80	Q3= 90	Range=40
RII	20	50	80	Range=50
RIII	75	85	100	Range=25

Knowledge of Value Systems and Cultures of the Non-Developed, and Developing World

	Q1	Md	Q3	Range
RI	Q1= 75	Md= 90	Q3=100	Range=25
RII	50	90	100	Range=40
RIII	75	85	90	Range=15

Knowledge of Problem Solving Techniques, Methods

	Q1	Md	Q3	Range
RI	Q1= 50	Md= 85	Q3=100	Range=50
RII	50	80	90	Range=40
RIII	70	80	90	Range=20

Knowledge of the Economics of World Food Supply

	Q1	Md	Q3	Range
RI	Q1= 80	Md= 90	Q3=100	Range=20
RII	80	90	100	Range=20
RIII	60	85	100	Range=40

Knowledge of the Psychological Factors Influencing Human Behavior

	Q1	Md	Q3	Range
RI	Q1= 50	Md= 80	Q3= 90	Range=40
RII	35	50	80	Range=45
RIII	60	80	90	Range=30

Knowledge of Small Animal Husbandry

	Q1	Md	Q3	Range
RI	Q1= 70	Md= 85	Q3=100	Range=30
RII	65	80	100	Range=35
RIII	50	100	100	Range=50

Knowledge of the Principles of Rural Technologies

	Q1	Md	Q3	Range
RI	Q1= 50	Md= 85	Q3=100	Range=50
RII	30	80	100	Range=70
RIII	50	90	100	Range=50

Knowledge of the Principles and Dynamics of Social Change

	Q1	Md	Q3	Range
RI	Q1= 70	Md= 75	Q3= 95	Range=25
RII	50	80	95	Range=45
RIII	50	85	100	Range=50

Knowledge of Food Storage and Preservation Principles

	Q1	Md	Q3	Range
RI	Q1= 80	Md=100	Q3=100	Range=20
RII	85	100	100	Range=15
RIII	50	[illegible]	100	Range=50

Knowledge of Cultural, Social Systems of Values in Western Civilization

	Q1	Md	Q3	Range
RI	Q1= 75	Md= 80	Q3= 90	Range=15
RII	50	75	90	Range=40
RIII	50	85	90	Range=40

Project Plans: the Prospect for 1975-76

The seven member Board of Trustees of the Mendocino Community College gave final approval to proceed with the project in March, 1975, following nearly a year of development and planning. Stipends have been provided for faculty members to devote time during the Summer, 1975 to work on the necessary curriculum revision and integration of the several disciplines involved in the project. The Student Services Division of the College is currently seeking to recruit 60 students for the one year curriculum. These students will complete the English, Natural Science, Social Science requirements for graduation; they may complete all required subjects by taking two additional classes during the Summer, 1976. Teams of 15 students will work with faculty members assigned to the Project for part of their full-time teaching contract. At the conclusion of the experimental period, an evaluation will be made of the persistence, performance, attitude and expectation characteristics of the students enrolled in the program. A further evaluation of the costs and student benefits of the project will be made in comparison with other curriculum patterns available to students at Mendocino College.

It is anticipated that the demands on both faculty and students will be great indeed. Several "promises" have been made to our prospective students, and we plan to deliver on those promises:

1. We promise to engage both the minds and bodies of our students in the discovery of the meaning of the world food crisis.
2. We promise to broaden and deepen the cultural perspective of our students as they engage this significant issue.
3. We promise to assist students discover their potency and potential as human beings, concerned with their community, the nation, and the world.

4. We promise to help students develop skills and attitudes that will help them focus their energies as world citizens.

5. We promise to do everything possible to help the students identify and accomplish meaningful educational goals at Mendocino College.

6. We promise to provide a solid foundation of learning for those students who intend to major in any of the disciplines included in the project.

Mendocino College and the National Change Project: A Final Note

As one of two participant institutions in the Change Project, Mendocino College has become, along with the resource institutions identified for their history of excellence and concern with change at the two-year level, part of a nation-wide reassessment of what it means to raise questions concerning the values of Liberal Education, and the methods of instruction most appropriate to its delivery in the last decades of the century. In this effort, we have been bound with public and private colleges and universities throughout the United States. We have found ourselves engaged in the common enterprise of defining how to achieve excellence in an era of declining resources and changing national values. In this venture thus far, we have found much more that binds us together with the rest of our colleagues in higher education than separates us from them. We feel close indeed to the concerns of Warren Wilson College, whose students we feel we know well, and whose creative response to the issues of the national project has been an inspiration to us in Ukiah. We have learned more about the Evergreen State Colleges, the University of Wisconsin at Green Bays, the Antiochs, the Miami-Dades of higher education. There really aren't many of them. Most of us continue the struggle for excellence at lower levels than we find characterizing the institutions involved in the national Change in Liberal Education Project.

Perhaps more surprizing to us than to anyone else is our discovery that maybe we have something to share, as well as something to gain by our participation. In the absence of large dollar commitments from public or private funding agencies, the real question of the national project has been one of commitment, not of resources. Given enough fiscal resources, change is probably a pretty easy matter. All you need do is buy it. And when the funding goes away, all you need do is discard it. Until the next grant comes in.

Well, the National Change Project isn't about that brand of institutional development. Our experience has been that there is in the Project a genuine concern with developing new models for Liberal Education. There is a genuine willingness to share knowledge without regard to institutional status or complexity.

Insofar as Mendocino College represents the two-year segment, we hope that we are able to do so with sensitivity and distinction. About the consequences of our modest experiment in Ukiah, California, we are most sanguine. If out of our experience the shape of Change in Liberal Education is altered because of our participation in the National Change Project, we shall be pleased to have been a part of that larger effort. Hopefully, our colleagues in two-year colleges will benefit from our experience and share in our results.

UNIVERSITY OF CALIF.
LOS ANGELES

NOV 26 1975

CLEARINGHOUSE FOR
JUNIOR COLLEGES